



PIPE AND TUBE

ASTM A513 MECHANICAL TUBING

Maruichi Leavitt Pipe & Tube, LLC 1717 W. 115th St., Chicago, IL 60643 Phone 773.239.7700 maruichi-leavitt.com

YOUR COMPLETE SOURCE FOR ELECTRIC WELDED TUBULAR PRODUCTS

THEORETICAL WEIGHT PER FOOT FACTORS

Outside Dimension		Nominal Wall Thickness								
Square	Rectangle	0.028	0.035	0.049	0.065	0.072	0.083	0.095	0.109	0.120
		22 Ga	20 Ga	18 Ga	16 Ga	15 Ga	14 Ga	13 Ga	12 Ga	11 Ga
1/2 x 1/2	3/8 x 5/8	0.180	0.221	0.301	0.385					
5/8 x 5/8		0.227	0.281	0.384	0.495					
3/4 x 3/4	1/2 x 1	0.275	0.340	0.467	0.606	0.664	0.753	0.846	0.950	1.028
13/16 x 13/16	5/8 x 1	0.299	0.370	0.509	0.661	0.725	0.823			
7/8 x 7/8	3/4 x 1	0.323	0.400	0.550	0.716	0.786	0.894			
	7/8 x 1	0.346	0.430	0.592	0.771	0.847	0.965			
1 x 1	1/2 x 1-1/2	0.370	0.459	0.634	0.827	0.909	1.035	1.169	1.321	1.436
1-1/8 x 1-1/8	3/4 x 1-1/2			0.717	0.937	1.031	1.176	1.331	1.506	1.640
1-1/4 x 1-1/4	1 x 1-1/2			0.800	1.048	1.153	1.317	1.492	1.691	1.844
1-1/2 x 1-1/2	1 x 2			0.967	1.269	1.398	1.600	1.815	2.062	2.252
	1-1/4 x 2			1.050	1.379	1.521	1.741	1.977	2.247	2.456
1-3/4 x 1-3/4	1-1/2 x 2				1.490	1.643	1.882	2.138	2.433	2.660
1-7/8 1-7/8	1-1/4 x 2-1/2				1.600	1.765	2.023	2.300	2.618	2.864
2 x 2	1 x 3				1.711	1.888	Structural			

This table is based on commonly used sizes. Other sizes are within our production capabilities. Not all size/gauge combinations run regularly. We invite your inquiry.

CORNER RADIUS TOLERANCE

Squares and Equivalent Restagles	Wall Thickness	Radius Tolerance Inches
1/2" to 2"	18 (0.049)	3/16 to 5/64
1/2" to 2"	16 (0.065)	1/16 to 7/64
3/4" to 2"	14 (0.083)	5/64 to 1/8
3/4" to 2"	13 (0.095)	3/32 to 5/32
3/4" to 2"	12 (0.109)	1/8 to 13/64
3/4" to 2"	11 (0.120)	1/8 to 7/32

Wall Thickness Tolerance

± 10% of spec. Nominal Wall Thickness

Note: Reference: ASTM A-513 Latest.

OUTSIDE DIMENSION TOLERANCE*

Largest Outside	Tol. Inches
1/2" to 5/8" Incl.	±0.004
Over 5/8" to 1-1/8"	±0.005
Over 1-1/8" to 1-1/2"	±0.006
Over 1-1/2" to 2"	±0.008
Over 2" to 3"	±0.010

*Measured at Least 2" From the end of the tube

Straightness Tolerance

Max. 1/16" in 3'

Squareness of Sides

Max. = Widest side (in) x 0.006"

TWIST TOLERANCE

Specified Dimension longest side, Inches	Maximum Twist in 3 Feet
1/2	0.032"
Over 1/2 to 1-1/2 Incl.	0.050"
Over 1-1/2 to 2-1/2 Incl.	0.062"
Over 2-1/2"	0.075"

LENGTH TOLERANCE

Length	Tol. Inches
1' to 3' Incl.	± 1/16
Over 3' to 12'	± 3/32
Over 12' to 20'	± 1/8
Over 20' to 30'	± 3/16

Maruichi Leavitt mechanical tubing is produced in accordance with the mechanical and chemical property requirements of ASTM A513

All above sizes are not rolled regularly and subject to minimum orders. Please send a quote to tubeman@leavitt-tube.com for more information



PIPE AND TUBE

ASTM A513 MECHANICAL TUBING

Maruichi Leavitt Pipe & Tube, LLC 1717 W. 115th St., Chicago, IL 60643 Phone 773.239.7700 maruichi-leavitt.com

YOUR COMPLETE SOURCE FOR ELECTRIC WELDED STEEL TUBULAR PRODUCTS

THEORETICAL WEIGHT PER FOOT FACTORS

Outside Diameter		Nominal Wall Thickness									
Decimal	Fraction	0.028 22 Ga	0.035 20 Ga	0.042 19 Ga	0.049 18 Ga	0.065 16 Ga	0.072 15 Ga	0.083 14 Ga	0.095 13 Ga	0.109 12 Ga	0.120 11 Ga
0.375	3/8	0.104	0.127	0.150	0.171	0.215					
0.406		0.113	0.139	0.163	0.187	0.237					
0.438	7/16	0.123	0.151	0.178	0.204	0.259					
0.500	1/2	0.141	0.174	0.206	0.236	0.302					
0.540		0.153	0.189	0.224	0.257	0.330					
0.562		0.160	0.197	0.233	0.269	0.345					
0.625	5/8	0.179	0.221	0.262	0.302	0.389	0.426	0.481			
0.675		0.194	0.239	0.284	0.328	0.424	0.464	0.525			
0.750	3/4	0.216	0.268	0.318	0.367	0.476	0.522	0.592	0.665	0.747	0.808
0.812	13/16	0.235	0.291	0.346	0.400	0.519	0.570	0.647	0.728	0.819	0.888
0.875	7/8	0.254	0.314	0.374	0.433	0.563	0.618	0.703	0.792	0.893	0.969
1.000	1	0.291	0.361	0.430	0.498	0.650	0.714	0.814	0.919	1.038	1.129
1.062	1-1/16				0.531	0.693	0.762	0.869	0.982	1.110	1.208
1.125	1-1/8				0.564	0.737	0.810	0.925	1.046	1.184	1.289
1.250	1-1/4				0.629	0.823	0.907	1.035	1.173	1.330	1.450
1.375	1-3/8				0.695	0.910	1.003	1.146	1.300	1.475	1.610
1.437	1-7/16				0.727	0.953	1.051	1.201	1.363	1.547	1.689
1.500	1-1/2				0.760	0.997	1.099	1.257	1.427	1.621	1.770
1.600					0.812	1.067	1.176	1.346	1.528	1.737	1.899
1.625	1-5/8				0.826	1.084	1.195	1.368	1.554	1.766	1.931
1.660					0.844	1.108	1.222	1.399	1.589	1.807	1.976
1.750	1-3/4				0.891	1.171	1.292	1.479	1.681	1.912	2.091
1.875	1-7/8				0.956	1.258	1.388	1.590	1.808	2.058	2.251
2.000	2				1.022	1.345	1.484	1.701	1.935	2.203	2.412
2.125	2-1/8				1.087	1.431	1.580	1.812	2.062	2.349	2.572
2.250	2-1/4				1.153	1.518	1.676	1.923	2.189	2.495	2.732
2.375	2-3/8				1.218	1.605	1.773	2.034	2.315	2.640	2.893
2.500	2-1/2				1.284	1.692	1.869	2.145	2.442	2.786	3.053
2.625	2-5/8				1.349	1.779	1.965	2.255	2.569	2.932	3.213
2.750	2-3/4				1.415	1.866	2.061	2.366	2.696	3.077	3.374

This table is based on commonly used sizes. Other sizes are within Maruichi Leavitt production capabilities. We invite your inquiry.

Maruichi Leavitt mechanical tubing is produced in accordance with the mechanical and chemical property requirements of ASTM A513

Hot Rolled	
OUTSIDE DIMENSION TOLERANCE*	
Largest Outside	Tol. Inches
1/2" to 1-1/8" Incl.	±0.0035
Over 1-1/8" to 2"	±0.005
Over 2" to 2-1/2"	±0.006
Over 2-1/2"	±0.008
Wall Thickness Tolerance	
Refer to ASTM A-513 Table 6	

Cold Rolled	
OUTSIDE DIMENSION TOLERANCE*	
Largest Outside	Tol. Inches
3/8" to 5/8" Incl.	±0.003
Over 5/8" to 1-1/8"	±0.0035
Over 1-1/8" to 2"	±0.005
Over 2" to 2-1/2"	±0.006
Over 2-1/2"	±0.008
Wall Thickness Tolerance	
Refer to ASTM A-513 Table 11	
*Measured at Least 2" From the end of the tube	

Straightness Tolerance	
Max. = 0.010" Per Foot	

LENGTH TOLERANCE	
Length	Tol. Inches
6" to under 12"	± 1/16
12" to under 48"	± 1/16
48" to under 10'	± 1/8
10' to 24'	± 1/4

Note: Reference: ASTM A-513 Latest.

All above sizes are not rolled regularly and subject to minimum orders. Please send a quote to tubeman@leavitt-tube.com for more information